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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,447	02/28/2002	Sang Yong Lee	0465-0907P-SP	4973
2292	7590	12/12/2006		EXAMINER
BIRCH STEWART KOLASCH & BIRCH				ARORA, GAURAV
PO BOX 747			ART UNIT	PAPER NUMBER
FALLS CHURCH, VA 22040-0747			2144	

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/084,447	LEE, SANG YONG
	Examiner	Art Unit
	Gaurav Arora	2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 February 2002.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 28 February 2002 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. P2001-10320.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

Claims 1-25 are presented for examination and are pending from Application # 10/084447.

Dated 02/28/2002

***Priority***

Korean application No. P2001-10320 filed on 02/28/2001

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-20 recite TS as Time Stamp and Transport Stream, it is unclear which is one is which in claims 1-20.

3. Claims 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 9 recite PID, PID must be defined in the claim before it can be used as acronym in the claim as to enable a person of ordinary person skilled in the art to establish mets and bounds of the claim.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3, 5, 7-11, 14-16, 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Rodriguez et al Pub. No. US 2002/0059623 A1

As per claim 1, Rodriguez teaches a media router comprising:

a media routing control part for giving a fixed unit of time stamp, a TS packet number, to every TS packet of a TS (Transport Stream) of a digital broadcasting or an analog broadcasting signal, and extracting index information from the TS having the time stamp added thereto;

[0048]

and, a storage part for receiving the TS having the time stamp added thereto and the index information from the media routing control part and storing therein. [0028]

As per claim 2, Rodriguez teaches a media router as claimed in claim 1, wherein the media routing control part includes;

a multiplexer for selecting and forwarding one of the TSs of the digital broadcasting signal and the analog broadcasting signal, [0028]

a format converting part for giving a time stamp to the TS from the multiplexer to synchronize, and extracting index information, and [0048]

a demultiplexer for selecting one of outputs of the multiplexer and the format converting part. [0058]

As per claim 3, Rodriguez teaches a media router as claimed in claim 2, further comprising

a scrambling/descrambling part for scrambling the TS having the time stamp given thereto and the index information or descrambling scrambled information from the storage part. [0078]

As per claim 5, Rodriguez teaches A media router as claimed in claim 1, wherein the storage part includes;

a system memory for storing the TS and the index information from the media routing control part, (Fig. 3A Headend Router)

and a storage medium for receiving the TS and the index information stored in the system memory and storing the TS and the index information, again. [0028]

As per claim 7, Rodriguez teaches a media router as claimed in claim 5, wherein the storage medium is either an HDD (Hard Disc Drive) or a DVD (Digital Versatile Disc). [0053]

As per claim 8 Rodriguez teaches a media router as claimed in claim 1, wherein the index information includes at least one of the TS packet number having a picture header and information on kind of picture. [ it is inherent that stream has a picture header and information on kind of picture, please read <http://en.wikipedia.org/wiki/MPEG-2>] [0053]

As per claim 9, Rodriguez teaches a media router comprising;  
a PID filter part for selecting only a TS of a desired program from a received digital broadcasting signal and forwarding the TS; [0043]

an MPEG-2 encoder for coding a received analog broadcasting signal into an MPEG-2 TS format, and forwarding the coded analog broadcasting signal; a media routing control part for giving a time stamp to every TS packet from the PID filter part or every TS packet of the analog broadcasting signal from an MPEG-2 encoder to, synchronize the TS packet, and extracting index information; [0028][0040]

a memory part for storing the TS synchronized at the media routing control part and the index information, [0028]

a decoding part for receiving, decoding, displaying a broadcasting signal or a signal reproduced through the memory part, and the media routing control part. [0078]

As per claim 10, Rodriguez teaches a media router as claimed in claim 9, wherein the media routing control part includes;

a multiplexer for selecting and forwarding one of the TSs of the digital broadcasting signal and the analog broadcasting signal, [0028]

a format converting part for giving a time stamp to the TS from the multiplexer to synchronize, and extracting index information, [0048]

a demultiplexer for selecting one of outputs of the multiplexer and the format converting part, and [0058]

a scrambling/descrambling part for scrambling the TS having the time stamp given thereto and the index information or descrambling scrambled information from the storage part. [0078]

As per claim 11, Rodriguez teaches a media router as claimed in claim 9, wherein the storage part includes;

a system memory for storing the TS and the index information from the media routing control part, and [0028]

a storage medium for receiving the TS and the index information stored in the system memory and storing the TS and the index information, again. [0028]

As per claim 14, Rodriguez teaches a media router as claimed in claim 9, wherein the index information includes at least one of the TS packet number having a picture header and

information on kind of picture. [it is inherent that stream has a picture header and information on kind of picture, please read <http://en.wikipedia.org/wiki/MPEG-2>]

As per claim 15, Rodriguez teaches a method for recording a broadcasting signal by using a media router having a media routing control part and a storage medium, comprising the steps of:

- (a) selecting one of TSs of a received digital broadcasting signal and a received analog broadcasting signal; [0028][0048]
- (b) adding a time stamp to a selected TS to synchronize, and extracting index information, for converting a format of the TS; and, [0048]
- (c) storing the TS having the time stamp added thereto and the index information in a storage medium. [0028]

As per claim 16, Rodriguez teaches a method as claimed in claim 15, further comprising the steps of:

determining whether a format converted TS is scrambled or not; [0078]  
and, scrambling and storing the TS if the TS is to be scrambled as a result of the determination, and storing the TS without scrambling the TS if the TS is not to be scrambled as a result of the determination. [0078]

As per claim 18, Rodriguez teaches a method for reproducing a broadcasting signal by using a media router having a media routing control part and a storage medium, comprising the steps of:

(a) converting formats of a time stamp and index information stored in the storage medium or a format of the TS only; and, [0078]

(b) decoding, and displaying a format converted TS. [0063]

As per claim 19, Rodriguez teaches a method as claimed in claim 18, wherein the step (a) includes the step of descrambling the TS before the format conversion, if the TS stored in the storage medium is in a scrambled state. [0078]

As per claim 20, Rodriguez teaches a method as claimed in claim 18, wherein the step (a) includes the step of converting a format of only a TS packet from the storage medium, with reference to the TS packet number, kind of picture, and the time stamp given to every TS packet in the index information stored in the storage medium, when a trick mode reproduction is to be carried out. [0078]

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 4 & 13, are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez in view of Munzo-Bustamante et al Patent No.: 5809291

As per claim 4 & 13 of claim 1 & 9, Rodriguez teaches the invention significantly & substantially as claimed wherein the TS and the index information from the media routing control part are stored in the storage part.

Rodriguez does not explicitly recites using a PCI bus. However Munzo-Bustamante teaches PCI bus configuration and its advantages. [Col1-Lines20-35]

It would have been obvious to one of ordinary skills in the art at the time the invention was made to store Rodriguez's TS and the index information from the media routing control part stored in the storage part via Munzo-Bustamante's PCI bus because Rodriguez's TS and index information from the media routing control part must be stored on Munzo-Bustamante's PCI bus for widest compatibility. Therefore, one would have been motivated to use PCI business since it is

very common in modern PCs, it has replaced ISA and VESA Local Bus as the standard expansion bus.

9. Claims 6 & 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez in view of Tamura Pub. No.: US 2002/0014146 A1

As per claim 6 & 12 of claim 5 & 11, Rodriguez teaches the invention significantly & substantially as claimed wherein the TS and the index information from the media routing control part are stored in the storage medium.

Rodriguez does not explicitly recites storing to storage medium via DMA. Tamura teaches DMA, its principle and its advantages. [Tamura 0081]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to store Rodriguez's TS and the index information from the media routing control part in the storage medium via Tamura's DMA because Rodriguez's TS and index information causes heavy load on the CPU, CPU needs to copy each piece of data from the source to the destination, but Tamura's DMA allows Rodriguez's TS and index information to be stored without causing heavy overhead on CPU. Therefore one would have been motivated to store via DMA because it reduces CPU load, streaming audio & video requires continuous storing/copying to and from one computer readable medium to another.

10. Claim 17 of 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez in view of Erickson Pub. No. US 2004/0210765 A1 (Erickson hereinafter)

As per claim 17 of claim 15, Rodriguez teaches the invention significantly & substantially as claimed,

Rodriguez does not explicitly teach protecting the copyrighted Multimedia files with a password. However Erickson teaches protecting the copyrighted Multimedia files with a password [0010]

It would have been obvious to one of ordinary skills in the art at the time the invention was made to put Erickson's password on Rodriguez's copyrighted multimedia files because Rodriguez's copyrighted multimedia is copied and sold illegally without proper licensing from the copyright holder, copyright violation is against Federal law, Erickson's password when combined with Rodriguez's copyright multimedia file prevent the violation and protect consumer. Therefore one would have been motivated to protect copyrighted multimedia file because it prevents violation of the Law, protects consumer and copyright holder.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gaurav Arora whose telephone number is 571-270-0169. The examiner can normally be reached on M-F 0800-1600.

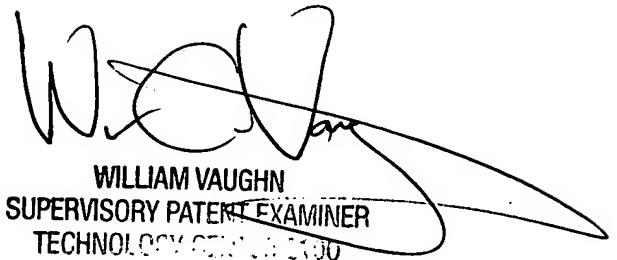
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on 572-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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12/04/2006

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